XR-3310/3312/4410/4412

SERVICE MANUAL

AEP Model
UK Model
XR-3310/4410

German Model
XR-3312/4412

Photo : XR-4412

Model Name Using Similar Mechanism	XR-4400/4401/4402
Tape Transport Mechanism Type	MG-36SZ3-32

SPECIFICATIONS

Power amplifier section

Outputs: Speaker outputs (sure seal connectors)
Speaker impedance: 4 – 8 ohms
Maximum power output:
XR-4410/4412: 25 W × 4 (at 4 ohms)
XR-3310/3312: 15 W × 4 (at 4 ohms)

Cassette player section

Tape track: 4-track 2-channel stereo
Frequency response: 30 – 16,000 Hz
Signal-to-noise ratio:
XR-4410/4412: Dolby B NR ON 63 dB; Dolby B NR OFF 55 dB
XR-3310/3312: 55 dB
Wow and flutter: 0.13% (WRMS)

Tuner section

FM

Tuning range: 87.5 – 108.0 MHz
Antenna terminal: External antenna connector
Intermediate frequency: 10.7 MHz
Usable sensitivity: 8 dBf (75 ohms)
Selectivity: 75 dB at 400 kHz
Signal-to-noise ratio: 65 dB (stereo), 70 dB (mono)
Harmonic distortion at 1 kHz: 0.6% (stereo), 0.4% (mono)
Separation: 35 dB at 1 kHz
Frequency response: 30 – 15,000 Hz
Capture ratio: 2 dB

MW/LW (SW for XR-3312/4412)

Tuning range: MW: 531 – 1,602 kHz; LW: 153 – 281 kHz; SW: 5,950 – 6,205 kHz
Antenna terminal: External antenna connector
Intermediate frequency: 450 kHz/10.71 MHz
Sensitivity: MW: 30 µV; LW: 70 µV; SW: 50 µV

General

Output lead: Power antenna relay control lead; Power amplifier control lead
Tone controls: Bass ± 8 dB at 100 Hz; Treble ± 8 dB at 10 kHz
Loudness: +6 dB at 100 Hz; +6 dB at 10 kHz
Power requirements: 12 V DC car battery (negative ground)
Dimensions: Approx. 186 × 57 × 170 mm (w/h/d), not incl. projecting parts and controls
Mounting dimensions: Approx. 182 × 53 × 154 mm (w/h/d), not incl. projecting parts and controls
Mass: Approx. 1.3 kg
Accessories supplied: Mounting hardware (1 set); Power connecting cord (1); Front panel case (1)

Design and specifications subject to change without notice.

XR-3310/4410 : FM/MW/LW CASSETTE CAR STEREO
XR-3312/4412 : FM/MW/SW CASSETTE CAR STEREO

SONY®

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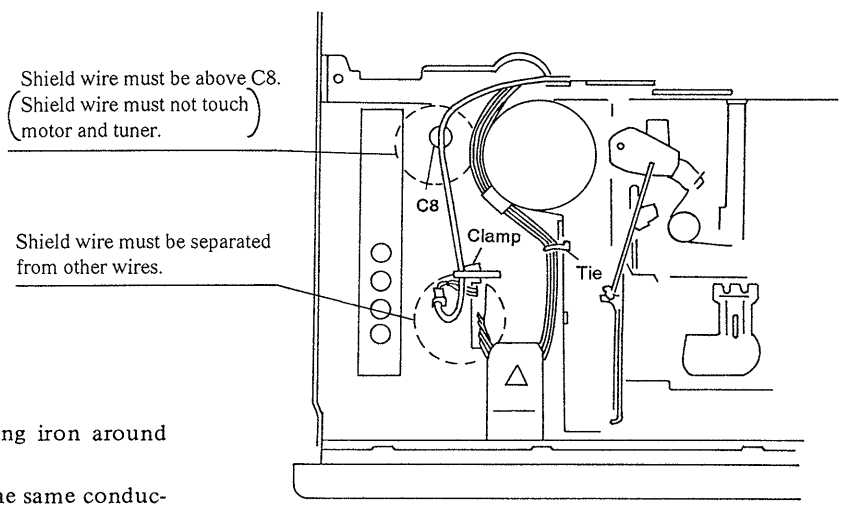
WARNING :


Shield wire must be above C8.
(Shield wire must not touch motor and tuner.)
Shield wire must be separated from other wires.
C8
Clamp
Tie

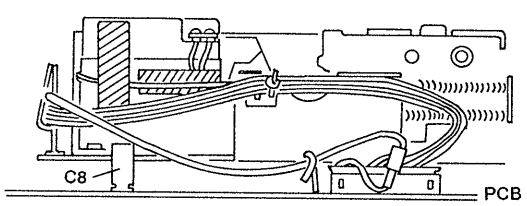
Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

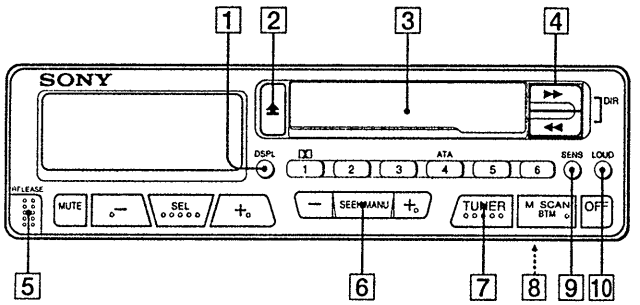
Notes on chip component replacement

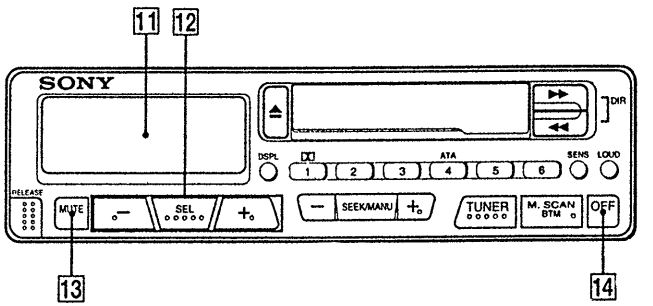
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

[SIDE VIEW]



Location and Function of Controls





Refer to the pages in ● for details.

1 DSPL (display change/time set) button ⑩
Each time the button is pressed, the display on the display window changes as follows:

During Tape playback	"TAPE" → Clock (Frequency → Clock)*
During Radio reception	Frequency → Clock

* While the ATA function is activated.

2 ≜ (eject) button
Press to stop tape playback and to eject the cassette.

3 Cassette insertion door

4 ◀◀/▶▶ (fast winding)/DIR (tape transport direction change) buttons ⑪
During playback, press ◀◀ or ▶▶ for fast winding, or press both ◀◀ and ▶▶ simultaneously to listen to the other side of the cassette.

5 RELEASE (front panel release) button ⑨

6 SEEK/MANU (automatic tuning/manual tuning) button ⑫

7 TUNER (radio on/band select) button ⑫
Each time the button is pressed, the band changes in order of:

→ FM1 → FM2 → FM3 → MW → LW →
(XR-3310/4410)

→ FM1 → FM2 → FM3 → MW → SW →
(XR-3312/4412)

8 POWER SELECT switch (located on the bottom of the unit)
See the description about the "POWER SELECT" switch in the Installation/Connections manual.

9 SENS (sensitivity) button (XR-3310/4410) ⑫
SDK (traffic announcement) button (XR-3312/4412) ⑯

10 LOUD (loudness) button (XR-3310/4410)
Press to reinforce the bass and treble especially when listening at a low volume level. To cancel the mode, press it once more.
SENS/LOUD (sensitivity/loudness) button (XR-3312/4412) ⑫
Press for more than two seconds to reinforce the bass and treble especially when listening at a low volume level. To disengage the button, press it again for more than two seconds (loudness function).

11 Display window

12 [−] [SEL] [+] button
Normally, the [−] or [+] buttons are pressed to control the volume. Pressing the SEL button changes the mode as follows:

→ BAS (bass) → TRE (treble) → BAL (balance) → FAD (fader) → VOL (volume) →

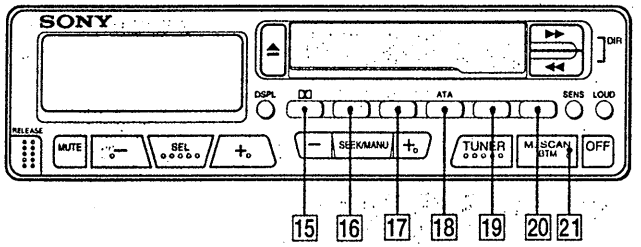
Press the [−] or [+] buttons (to adjust the level) within three seconds, or the volume mode will return.

Display window	[SEL]	[−] [+]	
	Control mode	**Press [−]**	**Press [+]**
BAS	Bass control	For less bass	For more bass
TRE	Treble control	For less treble	For more treble
BAL	Balance control	To decrease the right-speakers' volume	To decrease the left-speakers' volume
FAD	Fader control	To decrease the rear-speakers' volume	To decrease the front-speakers' volume
VOL	Volume control	For less volume	For more volume

13 MUTE button
Press to mute the sound momentarily.
Press again to restore the same volume level. This button will be also canceled:
— when the [+] or OFF button is pressed.
— when the ignition key of your car has been turned to the OFF position for more than 20 seconds.

14 OFF (power off) button
Press to turn off the radio.

This section is extracted from instruction manual.



	During tape playback	During radio reception
15	DD (Dolby NR) button (XR-4410/4412) Press when listening to a tape recorded in the Dolby B-NR system. To cancel, press it once more.	Preset number buttons ⑰ ⑮
16	—	
17	—	
18	ATA (Automatic Tuner Activation) button Press to make the tuner turn on automatically every time you fast-wind a tape. To cancel, press it once more.	
19	—	
20	—	
21	—	M.SCAN/BTM (Memory Scan/Best Tuning Memory) button ⑱ ⑮

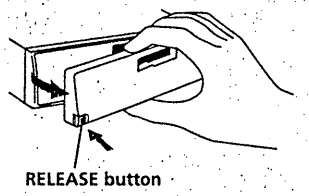
Muting a beep sound

Press the 6 button while pressing the SEL button. To obtain the beep sound again, press these buttons again.

Detaching and Attaching the Front Panel

Detaching the Front Panel

Before detaching the front panel, be sure to press the OFF button first. Then press the RELEASE button to open up the front panel, and detach the panel by pulling it towards you as illustrated.

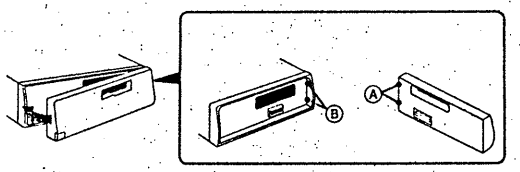


RELEASE button

Do not drop the panel when detaching it from the unit.

Attaching the Front Panel

Apply the right hand side of the front panel to the unit by attaching part Ⓐ of the front panel to part Ⓑ of the unit as illustrated and push until it clicks.



Do not press hard or apply excessive pressure to the display window of the front panel.

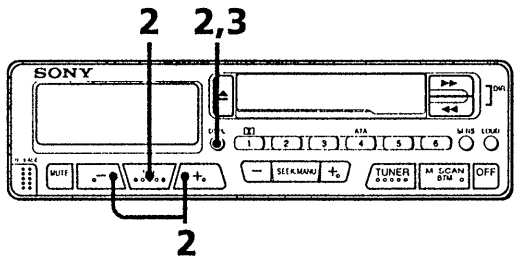
Caution alarm

If you turn the ignition key to the OFF position without removing the front panel, the caution alarm will be activated and a beep sound will be heard for a few seconds.

Notes

- Make sure that the front panel is the right way up when attaching it to the unit. It cannot be attached upside down.
- When attaching the front panel, do not press it hard against the unit. It can be easily attached by pressing lightly.
- Never leave the detached front panel in your car if it is parked in direct sunlight. There could be a considerable rise in temperature inside the car.
- When you carry the front panel with you, put it in the supplied front panel case.
- The display window may become warm while the unit is operated. This is not a sign of a malfunction.

Setting the Clock



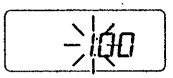
The clock has a 24-hour digital indication.

For example, set it to 10:08.

1 Turn the ignition key to the ON position.

2 Press the DSPL button for more than two seconds.

DSPL

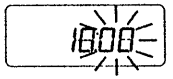


While keeping the DSPL button pressed, proceed with the following:

Press either side of the [-] [+] button to set the hour digits. (to go back) (to go forward)

Press the [SEEK/MAN] button.

Press either side of the [-] [+] button to set the minute digits. (to go back) (to go forward)

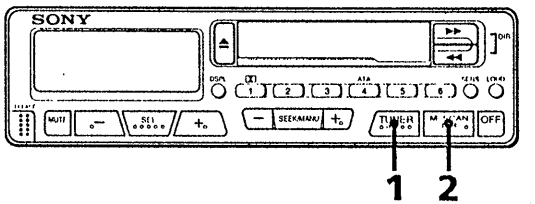


3 The clock starts activating when you take your finger off the DSPL button.

Note

If the POWER SELECT switch of the unit is set to the OFF position, the clock cannot be set unless the power is turned on. Set the clock after you turned on the radio, or tape playback.

Using the Memory Preset Function



Stations with clearest reception are automatically searched and memorized on each band (FM1, FM2, FM3 and MW, LW (SW)). Up to 6 stations on each band can be stored on the preset number buttons 1 to 6 in the order of frequency.

Memorizing the Stations Automatically

— BTM (Best Tuning Memory) Function

1 Select the desired band.

TUNER

2 Press the M.SCAN/BTM button for more than two seconds.

M. SCAN BTM

The BTM function

The BTM function searches all the receivable stations within the currently selected band and memorizes the ones in good receiving conditions in sequence from the lowest frequency.

How to memorize the stations on the preset number buttons

— When there is no preset number indicated on the display window, all the preset number buttons set in the currently selected band will be filled with the memories.

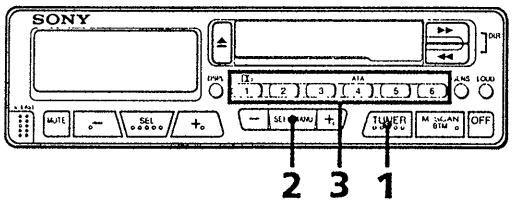
— When there is a preset number indicated on the display window, the unit will memorize the stations on the preset number buttons from the one currently being displayed. For example, when you choose FM1 and preset number 3 is being displayed, the operation will start from the preset number 3 on FM1 and stops at the preset number 6 on FM3.

The receivable frequencies of FM1, FM2 and FM3 are the same.

Therefore, 18 stations can be memorized on FM.

Note

There may be cases where there are not enough receivable stations due to the lack of stations in the vicinity or weak broadcasting signals. In such cases, the BTM operation may stop without all the buttons being occupied with memories.



Up to 6 stations on each band (FM1, FM2, FM3 and MW, LW (SW)) can be stored in the memory in order of your choice.

Memorizing Only the Desired Stations

For example, store a station on the preset number button 1.

1 Select the desired band.

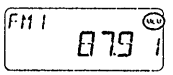
TUNER

2 Tune in the station which you wish to store on the preset number button (page 12).

– SEEK/MANU +

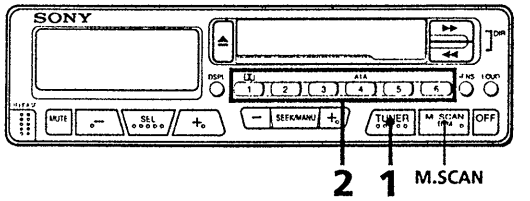
3 Keep the preset number button pressed for about two seconds until the "MEM" indication comes on in the display window.

1



The "MEM" indication goes off after a while.
Repeat the same procedure to store other stations.

Only one station per band (FM1, FM2, FM3 and MW, LW (SW)) can be stored in the memory on each preset number button.
If you try to store another station on the same preset number button, the previously stored station will be erased.



Receiving the Memorized Stations

1 Select the desired band.

TUNER

2 Press the desired preset number button lightly.

1 — 6

Notes

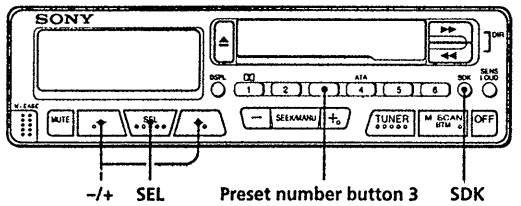
- There may be cases in which even the stations stored in the memory cannot be received due to weak signals in the vicinity of your car.
- If you keep pressing the preset number button for more than two seconds, the currently received station will be memorized. To receive the previously memorized station, press the preset number button only lightly.

Checking in Order, All the Stations Stored in the Memory — Memory Scan Function

Press the M.SCAN button lightly.

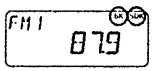
The tuner will receive in order, all the stations stored in the memory for five seconds each. To cancel the function, press the button lightly once more.

Receiving Traffic Announcements
(XR-3312/4412)



Press the SDK button.

SDK



The unit will search for a traffic information station when the "SDK" indication appears on the display window.
When the station is tuned in, the "SK" indication will also appear. When a traffic announcement starts, "SDK" indication will be flashing.

To Stop Receiving the Traffic Announcements

Press the SDK button once again.

Notes

- While the station is broadcasting a traffic announcement (while the "SDK" indication is flashing), the SEEK/MANU, the SENS and the preset number buttons will not be operational.
- While the unit is receiving a traffic information station (while the "SDK" is flashing), the BTM function and the memory scan function cannot be activated.

To search for another traffic information station
Press the SEEK button while the "SDK" indication is lit but not flashing.

When a traffic announcement starts
The reception of the traffic announcement will override the current radio broadcast or tape playback. When the announcement is over, the interrupted radio reception or tape playback will be resumed.

Traffic Announcement is Heard at the Preset Volume Level

1 **Adjust the volume to the desired level with the – or + button.**

2 **Press the 3 while pressing the SEL button.**
A beep sound will be heard and the volume level will be memorized.

A traffic announcement program is heard at the preset volume level when it starts.

To receive the preset traffic announcement station
Press a desired preset number button lightly while "SDK" indication is displayed. The number of the pressed preset number button is displayed on the display window.
When you press the preset number button on which a station was memorized without SDK mode, "SDK" indication disappears.

SECTION 2
ADJUSTMENTS

PRECAUTION

1. Wipe the following components with an absorbent cotton cloth moistened with alcohol before adjustment :
   PB head — Pinch roller
   Idlers — Rubber belts
   Capstan
2. Demagnetize the PB head using a head demagnetizer.
3. Be careful not to use a magnetized screwdriver
4. After the adjustments is completed, lock the adjustment parts using screws.
5. Unless otherwise specified, make adjustments at the specified voltage (14.4V)

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	40 – 75g•cm (0.56 – 1.04 oz•inch)
FWD Back Tension		1 – 5g•cm (0.014 – 0.06oz•inch)
REV	CQ-102RC	40 – 75g•cm (0.56 – 1.04 oz•inch)
REV Back Tension		1 – 5g•cm (0.14 – 0.06 oz•inch)
FF, REW	CQ-201B	45 – 150g•cm (0.63 – 2.08 oz•inch)

SECTION 3
ELECTRICAL ADJUSTMENTS

TEST MODE

This set have the test mode function, in the test mode. FM Auto Scan/Stop Level and AM Auto Scan/Stop Level adjustments can be performed easier than it in ordinaly procedure.

<Set the Test Mode>

1. Set the "OFF" mode.
2. Push the preset [4] button.
3. Push the preset [5] button.
4. Press the preset [1] button for two seconds.
5. Then the display indicates five patterns and stops, the test mode is set.

<Rerease the Test mode>

1. Push the "OFF" button.

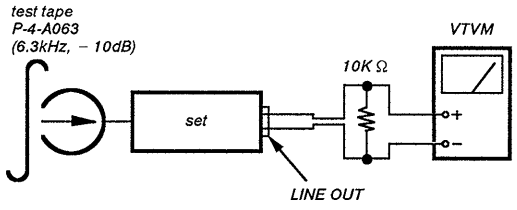
See the adjustment location from on page 12 for the adjustment.

DECK SECTION 0 dB=0.775V

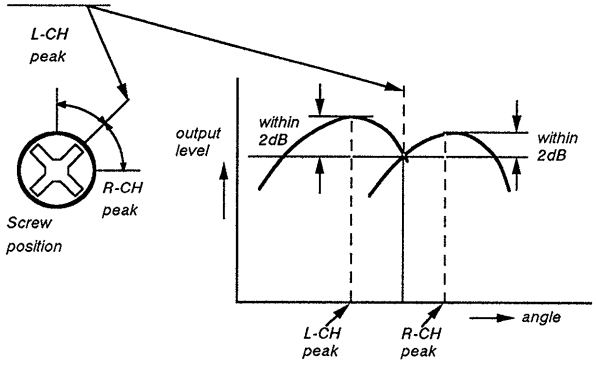
PB Head Azimuth Adjustment

Procedure :

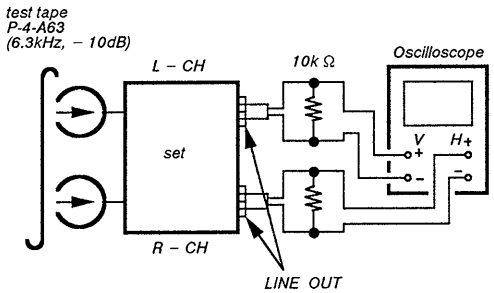
1. Put the set into the FWD PB mode.

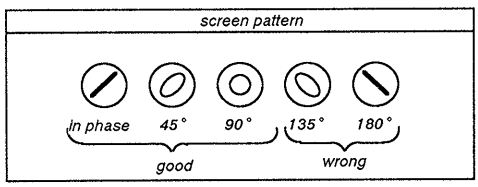


2. Turn the screw and check the output peak value. Adjust the screw so that the peak value in channels L and R coincides within 2dB.

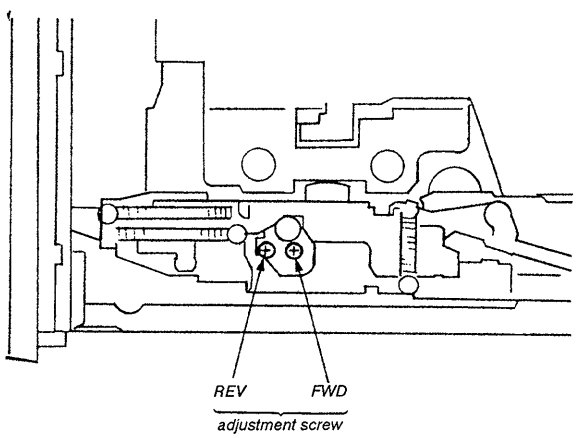


3. Playback Mode





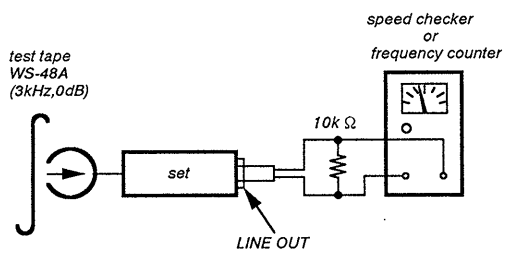
4. Repeat the above adjustment for the REV PB mode.



Capstan Motor Tape Speed Adjustment

Procedure :

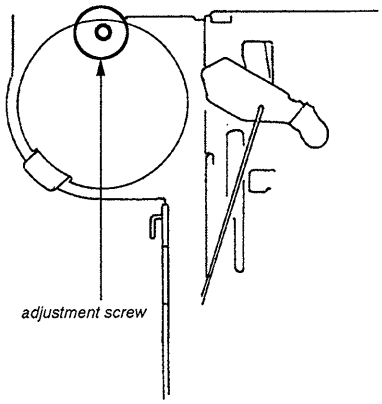
1. Put the set into the FWD PB mode.



Specification : Constant speed

Speed checker	frequency counter
– 2 to +3%	2,940 to 3,090 Hz

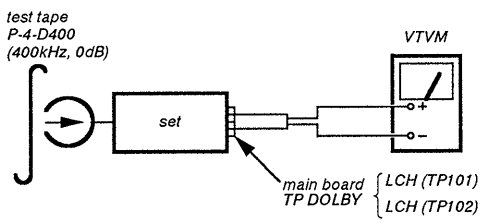
Adjustment Location : Capstan motor volume



DOLBY Level Adjustment

Setting :

(Dolby NR) button : OFF
SEL (volume) button : Maximum
SEL (balance) button : Center
SEL (bass) button : Center
SEL (treble) button : Center



Procedure :

1. Put the set into the FWD PB mode.
2. Adjust RV101 (L-CH) and RV201 (R-CH) so that VTVM reading on – 6dB (0.38V)

Adjustment Location : equalizer board

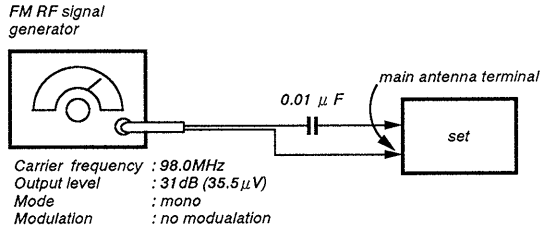
TUNER SECTION | 0 dB=1 μV

Cautions during repair
When the front end is defective, replace it by a new one because its internal block is difficult to repair.

FM Auto Scan Stop Level Adjustment

Setting :

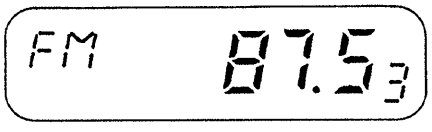
TUNER button : FM



Procedure :

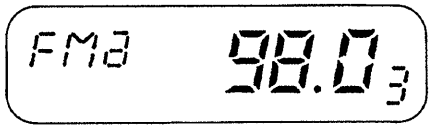
1. Set to the test mode. (see page 8)
2. Push the TUNER button and set to FM.

Main Display



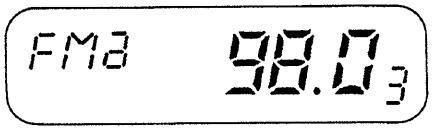
3. Push the preset 3 button.

Main Display



4. Push the preset SEEK/AMS + ⏭ button.
5. Adjust with the volume RV3 on TU1 so that the "FM" indication turns to "FM0" indication on the sub display window. But in case of already indicated "FM0" , turn the RV3 so that put out light "0" indication and adjustment.

Main Display



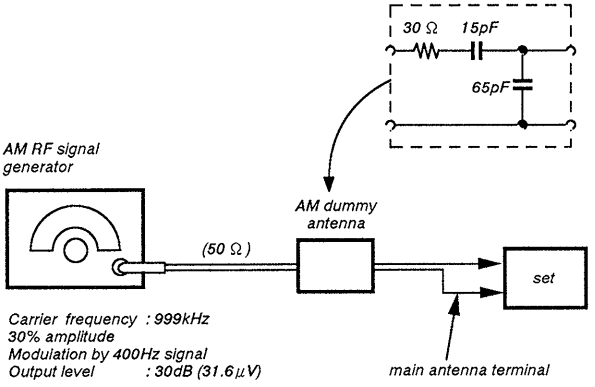
Specification : Stop sensitivity : 31dB ± 3dB

Note : "0" indication of sub display was align voltage of TP (SD).
TP (SD) voltage 0V → "0" light off
TP (SD) voltage 5V → "0" light on

MW Auto Scan Stop Level Adjustment

Setting :

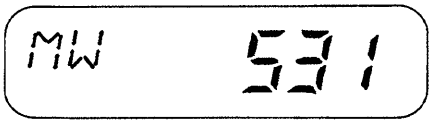
TUNER button : MW



Procedure :

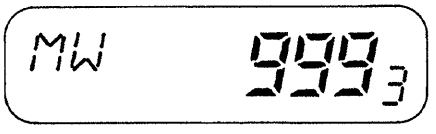
1. Set to the test mode. (see page 8)
2. Push the TUNER button and set to MW.

Main Display



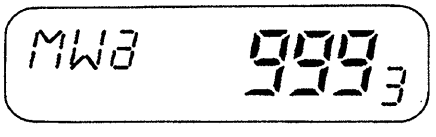
3. Push the preset 3 button.

Main Display



4. Adjust with the volume RV1 on TU1 so that the "MW" indication turns to "MW0" indication on the sub display window.
But in case of already indicated "MW0" , turn the RV1 so that put out light "0" indication and adjustment.

Main Display



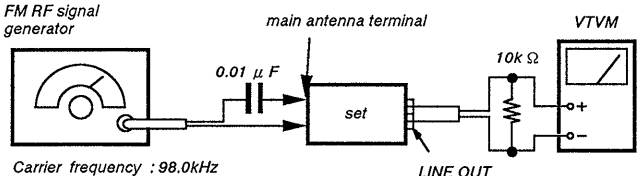
Specification : Stop sensitivity : 30dB ± 3dB

Note : "0" indication of sub display was align voltage of TP (SD).
TP (SD) voltage 0V → "0" light off
TP (SD) voltage 5V → "0" light on

High Cut Control Effect Adjustment

Setting :

TUNER button : FM



Procedure :

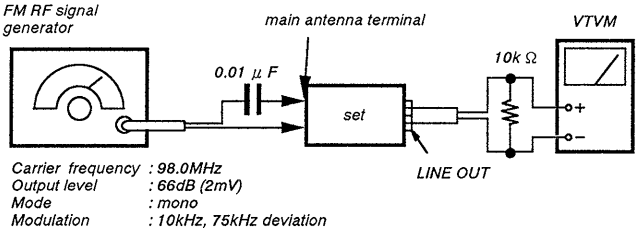
1. Tune the 98.0MHz.
2. The then output level is supposing that (A) dB.
3. Adjust with the volume RV2 on TU1 so that the output Level is (A) − 6 ± 1dB then signal generator input set to 20dB.

Adjustment Location : Main board (TU1)

FM Noise Focus Adjustment

Setting :

TUNER button : FM



Procedure :

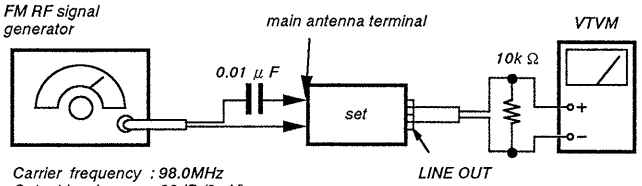
1. Tune the 98.0MHz.
2. The then output level is supposing that (B) dB.
3. Adjust with the volume RV5 on TU1 so that the output Level is (B) − 30 ± 1dB then signal generator input set to 20dB.

Adjustment Location : Main board (TU1)

FM Stereo Separation (25dB) Adjustment

Setting :

TUNER button : FM



Procedure :

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV4 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV4 for minimum reading.

L-CH Stereo separation : Ⓐ − Ⓑ
R-CH Stereo separation : Ⓒ − Ⓓ
The separations of both channels should be equal.

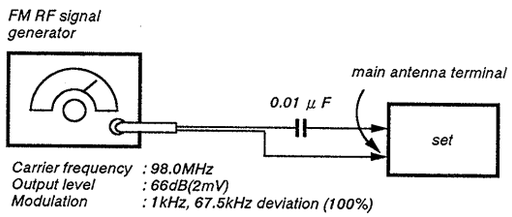
Specification : Separation more than 25dB.

Adjustment Location : Main board (TU1)

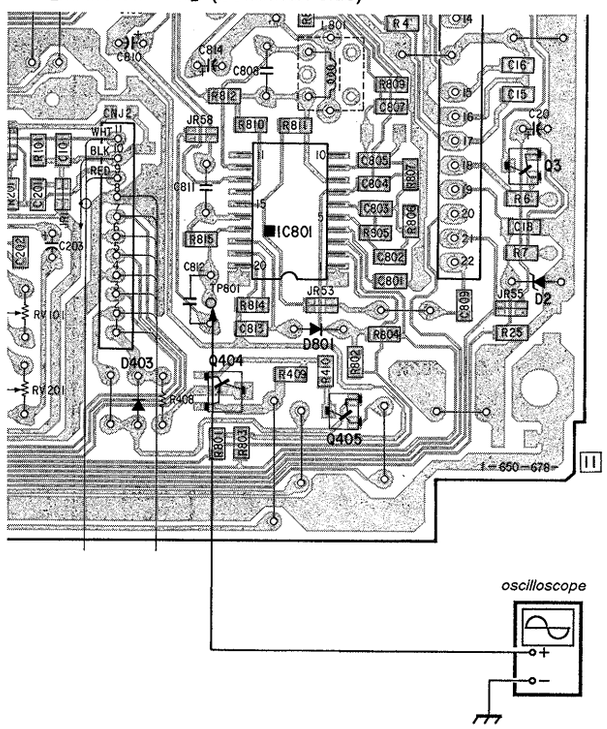
ARI Sensitivity Adjustment (XR-3312/4412 only)

Setting :

TUNER button : FM



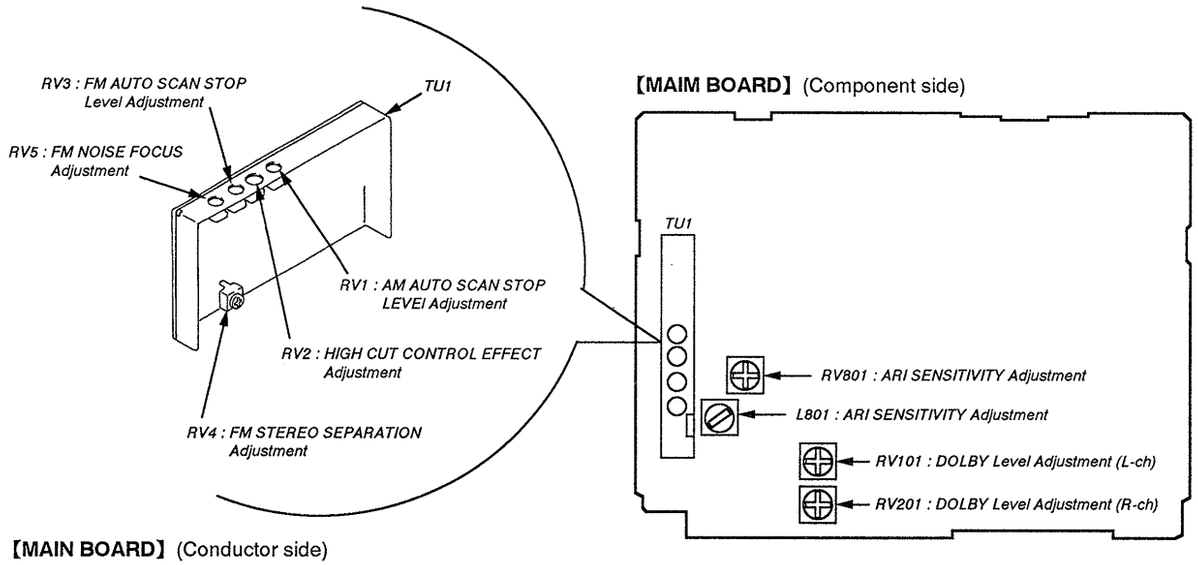
【MAIN BOARD】(Conductor side)



Procedure :

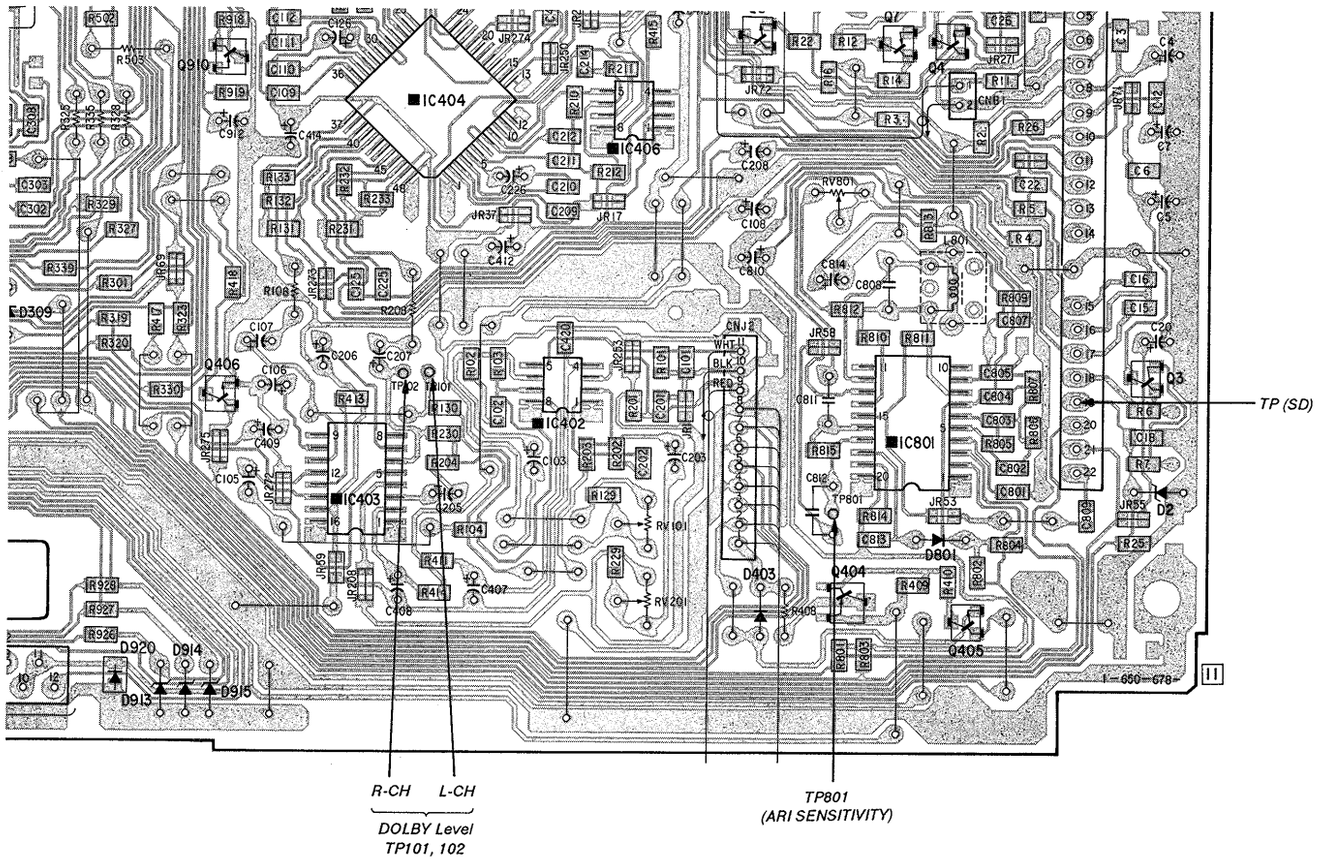
1. Connect the oscilloscope to test point (TP801).
2. Turn ON the SDK button adjust the frequency to 98.0MHz.
3. Adjust L801 and RV801 so that the waveform of the oscilloscope becomes maximum (min. 1V).

Adjustment Location : MAIN board


RV3 : FM AUTO SCAN STOP Level Adjustment
TU1
RV5 : FM NOISE FOCUS Adjustment
RV1 : AM AUTO SCAN STOP LEVEl Adjustment
RV2 : HIGH CUT CONTROL EFFECT Adjustment
RV4 : FM STEREO SEPARATION Adjustment
【MAIM BOARD】(Component side)
TU1
RV801 : ARI SENSITIVITY Adjustment
L801 : ARI SENSITIVITY Adjustment
RV101 : DOLBY Level Adjustment (L-ch)
RV201 : DOLBY Level Adjustment (R-ch)

【MAIN BOARD】(Conductor side)

【MAIN BOARD】(Conductor side)



SECTION 4
DIAGRAMS

● SEMICONDUCTOR LEAD LAYOUTS

HA13150A
HA13151

RD5.1ES-B2
RD5.6ESB2
RD6.8ES-B2
RD8.2ESB1
1SR139-100

DTA144EK
DTC144EK
DTC314TKH04
2SA1162-G
2SA1036K-R
2SC1623-L5L6
2SC2412K-QR
2SD601A-S

RL254-H21

2SB1115A

DAP202K

AY1101W

DAN202K

DTZ5.1B
DTZ5.6B
1SS133
1SS355

● SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D2	H - 22	D902	B - 12	Q7	E - 20
D301	I - 13	D903	C - 13	Q8	E - 19
D302	H - 13	D906	B - 13	Q102	C - 19
D305	H - 13	D909	B - 13	Q103	C - 20
D307	I - 13	D910	C - 15	Q202	C - 20
D308	I - 13	D913	I - 16	Q203	C - 20
D309	G - 15	D914	I - 16	Q404	H - 20
D403	H - 19	D915	I - 16	Q405	H - 21
D501	B - 14	D916	I - 13	Q408	G - 16
D701	G - 4	D917	I - 13	Q901	B - 13
D702	G - 2	D918	I - 13	Q902	C - 13
D703	G - 2	D919	C - 17	Q903	B - 12
D704	G - 7	D920	I - 16	Q904	C - 12
D705	G - 6			Q906	C - 14
D706	G - 5	IC301	F - 14	Q907	C - 15
D707	G - 7	IC402	G - 18	Q908	B - 13
D708	G - 6	IC403	H - 17	Q909	B - 12
D709	G - 6	IC404	E - 17	Q910	E - 16
D710	G - 10	IC405	D - 16	Q911	C - 13
D711	G - 9	IC406	E - 19	Q912	C - 16
D712	G - 8	IC501	B - 18		
D713	G - 11	IC701	J - 3		
D714	G - 10	IC801	G - 20		
D715	G - 9	IC901	C - 13		
D722	J - 4				
D723	J - 7	Q2	D - 20		
D724	J - 7	Q3	G - 22		
D725	J - 7	Q4	E - 20		
D801	H - 20	Q5	D - 21		
D901	B - 13	Q6	D - 20		

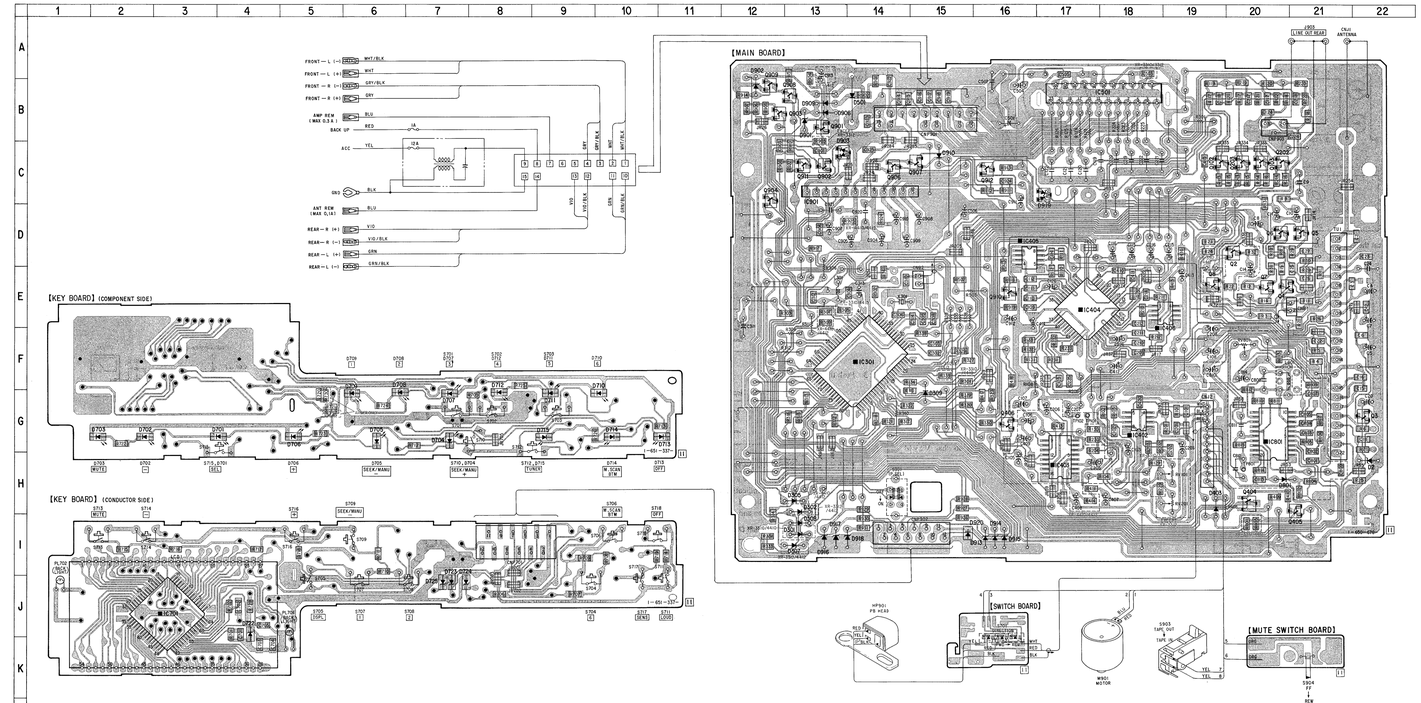
Note:

- ○— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▒ : Pattern on the side which is seen.

Caution :

Pattern face side : Parts on the pattern face side seen from (Conductor Side) the pattern face are indicated.
Parts face side : Parts on the parts face side seen from the (Component side) parts face are indicated.

4-1. PRINTED WIRING BOARDS

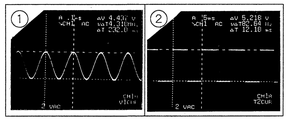


Note :

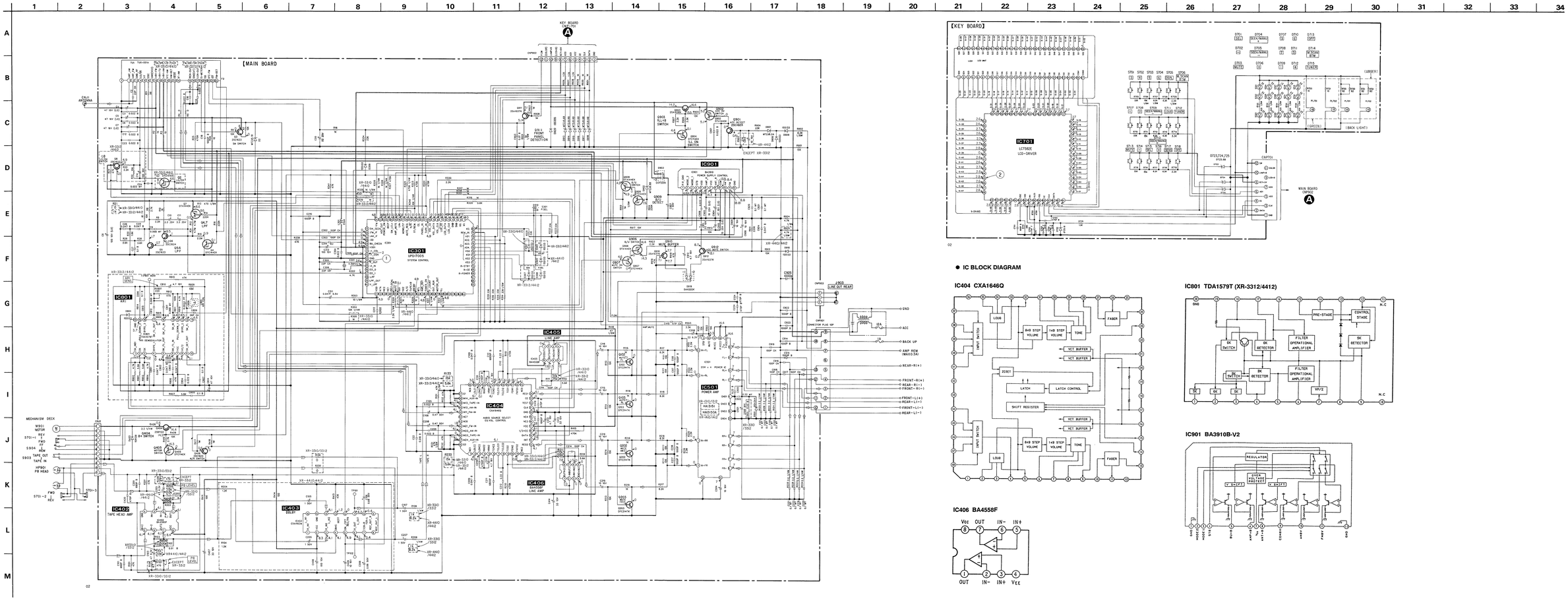
- All capacitors are in μ F unless otherwise noted. pF: μ μ F
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- % : indicates tolerance.
- : nonflammable resistor.
- : fusible resistor.
- : B+ Line
- : adjustment for repair.

- Power voltage is dc 14.4V and fed with regulated dc power supply from BACK UP and ACC terminals.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : AM
  ( ) : TAPE
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : FM : PB

● WAVEFORMS

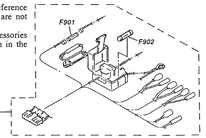


4-2. SCHEMATIC DIAGRAM

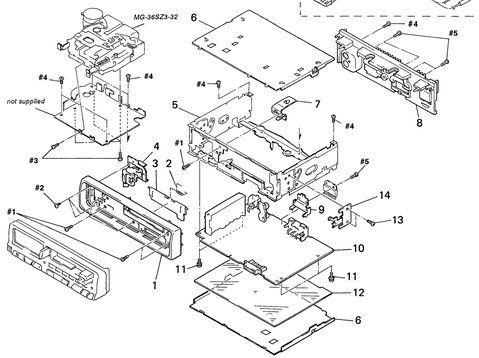


SECTION 5
EXPLODED VIEWS

NOTE :
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Color indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE)....(RED)
  ↑ Parts color ↑ Cabinet's color
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.



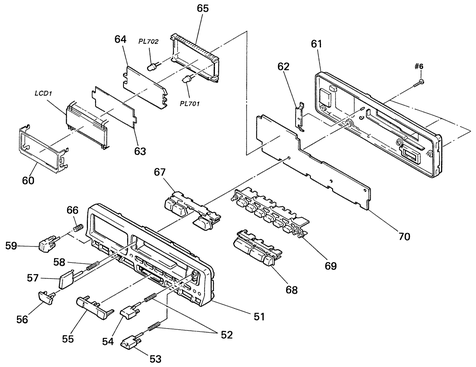
5-1. CABINET SECTION



Ref.No.	Part No.	Description	Remark
1	3-909-069-01	PANEL, SUB	
2	3-377-892-01	SPRING (C DOOR), TORSION	
3	3-909-083-01	DOOR, CASSETTE (XR-4410)	
3	3-909-083-11	DOOR, CASSETTE (XR-4412)	
3	3-909-083-21	DOOR, CASSETTE (XR-3310)	
3	3-909-083-31	DOOR, CASSETTE (XR-3312)	
4	X-3367-636-1	LOCK ASSY	
* 5	X-3367-690-1	CHASSIS ASSY	
* 6	3-909-092-01	COVER	
* 7	3-909-089-01	PLATE, LOCK	
* 8	3-909-081-21	HEAT SINK	
* 9	3-909-091-01	BRACKET (IC)	

Ref.No.	Part No.	Description	Remark
* 10	A-3222-743-A	MAIN BOARD, COMPLETE (XR-3312)	
* 10	A-3222-744-A	MAIN BOARD, COMPLETE (XR-3310)	
* 10	A-3222-745-A	MAIN BOARD, COMPLETE (XR-4412)	
* 10	A-3222-746-A	MAIN BOARD, COMPLETE (XR-4410)	
11	3-375-464-11	SCREW(+PTT 2.6X6),GROUND POINT	
* 12	3-909-094-01	INSULATOR	
13	3-344-581-21	SCREW (M4X4)	
* 14	3-909-090-01	PLATE (R), LOCK	
CNJ901	1-765-126-21	CORD (WITH CONNECTOR)	
F901	1-532-414-11	FUSE (1A)	
F902	1-532-678-11	FUSE (12A)	

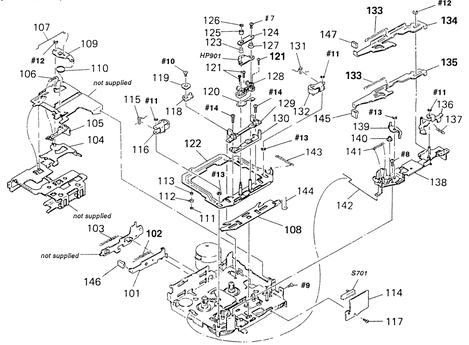
5-2. FRONT PANEL SECTION



Ref.No.	Part No.	Description	Remark
51	3-909-067-01	PANEL, FRONT	
51	3-909-067-11	PANEL, FRONT	
51	3-909-067-21	PANEL, FRONT	
51	3-909-067-31	PANEL, FRONT	
52	3-375-372-01	SPRING (F/R)	
53	3-909-072-01	BUTTON (REW)	
54	3-909-071-01	BUTTON (FF)	
55	3-909-074-01	BUTTON (SEEK)	
56	3-909-077-01	BUTTON (SEL)	
57	X-3367-689-1	BUTTON (EJECT) ASSY	
58	3-375-371-11	SPRING (EJECT)	
59	3-909-078-01	BUTTON (RELEASE)	
* 60	3-909-088-01	PLATE (LCD), GROUND	

Ref.No.	Part No.	Description	Remark
61	3-909-068-01	PANEL, FRONT BACK	
62	3-909-093-01	PLATE (F-S), GROUND	
* 63	3-909-082-01	SHEET (REFLECTOR)	
* 64	3-909-080-01	PLATE, LIGHT GUIDE	
* 65	3-909-079-01	HOLDER (LCD)	
66	3-375-373-01	SPRING (RELEASE)	
67	3-909-076-01	BUTTON (MUTE)	
68	3-909-075-01	BUTTON (OFF)	
69	3-909-073-01	BUTTON (1-6)	
* 70	A-3298-059-A	KEY BOARD, COMPLETE	
LCD1	1-810-393-11	DISPLAY PANEL, LIQUID CRYSTAL	
PL701	1-517-156-11	LAMP, PILOT	
PL702	1-517-156-11	LAMP, PILOT	

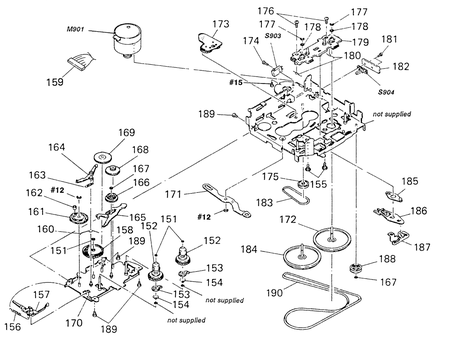
5-3. MECHANISM DECK SECTION (1)
(MG-36SZ3-32)



Ref.No.	Part No.	Description	Remark
* 101	3-379-144-01	LEVER (S), EJECT	
102	3-392-950-01	SPRING	
103	3-392-951-01	SPRING	
* 104	3-392-921-01	LOCK ASSY, EJECT CAM	
105	3-392-972-01		
106	3-392-953-01	SPRING	
107	3-392-969-01	LINK, RETURN	
* 108	3-392-919-01	ARM ASSY, F,R SELECTION	
* 109	3-392-932-01	PLATE, CENTER	
110	3-392-961-01	SPRING (B)	
111	3-570-615-00	POLY-WASHER (DIA.1.2)	
112	3-392-945-01	ROLLER (A), H.P	
113	3-392-942-01	ROLLER (B), H.P	
114	3-392-970-01	CHASSIS, SWITCH	
115	3-392-953-01	SPRING (R)	
116	3-375-378-01	ARM (R) ASSY, PINCH	
* 117	4-908-792-11	SCREW (BZX3), TAPPING, P1	
118	3-372-244-01	ARM (N), MUTE	
* 119	3-397-427-01	COLLAR, MUTE ARM	
120	3-377-908-01	SHIM (X), ADJUSTOR	
121	3-375-379-01	SCREW, AZIMUTH	
* 122	3-392-975-05	PLATE ASSY (S), HEAD	
123	3-392-956-01	SPRING (A)	
* 124	3-392-930-01	RETAINER, SPRING	
125	3-392-943-01	ROLLER, FF	

Ref.No.	Part No.	Description	Remark
126	3-676-387-00	POLY-SLIDER (DIA.1.6)	
127	3-392-955-01	SPRING (A)	
* 128	3-379-142-01	ARM (B), ADJUSTOR	
129	3-392-984-02	GUIDE, TAPE	
130	3-377-909-02	LINK (A), ADJUSTOR	
131	3-392-957-01	SPRING (F)	
132	3-375-377-01	ARM (F) ASSY, PINCH	
133	3-392-948-01	SPRING	
* 134	3-379-145-01	LEVER (S), FF	
* 135	3-379-146-01	LEVER (S), REW	
* 136	3-392-935-01	ARM, LOCK	
137	3-392-917-01	SPRING	
* 138	3-372-242-01	BRACKET ASSY (D), LEVER	
* 139	3-392-933-01	LEVER (B), CHANGE	
140	3-392-994-01	ROLLER, PROGRAM	
141	3-392-954-01	SPRING	
142	3-372-243-01	LINK (B), SELECTOR	
143	3-392-952-01	SPRING	
144	3-392-962-01	SPRING	
* 145	3-379-139-01	BUTTON, REW	
* 146	3-379-140-01	BUTTON, EJECT	
* 147	3-379-141-01	BUTTON, FF	
HP901	1-543-717-11	HEAD, MAGNETIC (PLAYBACK)	
S701	1-692-502-11	SWITCH, SLIDE (FWD/REV)	

5-4. MECHANISM DECK SECTION (2)
(MG-36SZ3-32)



Ref.No.	Part No.	Description	Remark
151	3-676-387-00	POLY-SLIDER (DIA.1.6)	
152	3-376-196-01	SPINDLE ASSY (S), REEL	
153	3-375-380-01	CAM ASSY, DETECTION	
154	3-370-619-01	SPRING, BACK TENSION	
155	3-392-918-01	SCREW, EJECT HOOK	
156	3-392-959-01	SPRING	
157	3-392-945-02	RATCHET	
158	3-392-990-01	GEAR, DETECTION	
159	3-387-912-01	CONNECTOR ASSY, 11P	
160	3-392-960-01	SPRING	
161	3-392-987-01	GEAR, SELECTOR	
162	3-392-944-01	COLLAR (CELECTER GEAR)	
* 163	3-375-131-01	SPRING, GEAR LOCK ARM	
164	3-392-989-02	ARM, GEAR LOCK	
165	3-392-986-01	ARM, SENSOR	
166	3-392-915-01	GEAR, IDLE	
167	3-570-615-00	POLY-WASHER (DIA.1.2)	
168	3-392-936-01	GEAR (A)	
169	3-392-937-01	GEAR (B)	
* 170	3-392-976-01	BASE ASSY, REEL	
* 171	3-392-979-01	LEVER, REVERSE	
172	3-392-926-02	FLYWHEEL ASSY (BF)	

Ref.No.	Part No.	Description	Remark
173	3-392-916-01	ARM ASSY, TU GEAR	
174	3-318-203-11	SCREW (BL.TX3), TAPPING	
175	3-392-938-01	GEAR, PULLY	
176	3-318-204-81	SCREW (M1.7X3), TAPPING	
177	3-590-768-00	RING (A), E	
178	3-701-437-11	POLY-SLIDER (A)	
* 179	3-375-381-01	BRACKET ASSY (X), CM	
180	3-392-963-01	SPRING (R)	
181	3-318-204-91	SCREW (M1.7X4), TAPPING	
182	3-375-376-01	MUTE (PWB)	
183	3-375-375-02	BELT (C), SUB	
184	3-392-995-02	FLYWHEEL ASSY (BR)	
* 185	3-392-925-01	ARM (A) ASSY, F.R	
* 186	3-392-939-01	ARM, FF	
* 187	3-392-934-01	ARM (B), F.R	
188	3-392-941-01	PULLEY (A), IDLE	
* 189	4-908-792-11	SCREW (BZX3), TAPPING, P1	
190	3-392-967-01	BELT, MAIN	
M901	X-3364-496-1	MOTOR ASSY	
S903	1-692-065-11	SWITCH, LEAF (TAPE IN/OUT)	
S904	1-554-790-21	SWITCH, POWER (FF/REW)	

SECTION 6
ELECTRICAL PARTS LIST

KEY

NOTE :
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ , for example :
  uA.... : μ A.... , uPA.... : μ PA....
  uPB.... : μ PB.... , uPC.... : μ PC....
  uPD.... : μ PD....
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-3298-059-A	KEY BOARD, COMPLETE			
		**********			
*	3-909-079-01	HOLDER (LCD)			
*	3-909-080-01	PLATE, LIGHT GUIDE			
*	3-909-082-01	SHEET (REFLECTOR)			
*	3-909-088-01	PLATE (LCD), GROUND			
		< CAPACITOR >			
C701	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C702	1-162-637-11	CERAMIC CHIP	0.47uF		16V
C703	1-162-637-11	CERAMIC CHIP	0.47uF		16V
C704	1-162-637-11	CERAMIC CHIP	0.47uF		16V
C705	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
		< CONNECTOR >			
CNP701	1-764-423-11	PIN, CONNECTOR 12P			
		< DIODE >			
D701	8-719-975-84	LED	AY1101W (SEL) (AMBER)		
D701	8-719-987-43	LED	CL-150PG-CD (SEL) (GREEN)		
D702	8-719-975-84	LED	AY1101W (-) (AMBER)		
D702	8-719-987-43	LED	CL-150PG-CD (-) (GREEN)		
D703	8-719-975-84	LED	AY1101W (MUTE) (AMBER)		
D703	8-719-987-43	LED	CL-150PG-CD (MUTE) (GREEN)		
D704	8-719-975-84	LED	AY1101W (SEEK/MANU +) (AMBER)		
D704	8-719-987-43	LED	CL-150PG-CD (SEEK/MANU +) (GREEN)		
D705	8-719-975-84	LED	AY1101W (SEEK/MANU -) (AMBER)		
D705	8-719-987-43	LED	CL-150PG-CD (SEEK/MANU -) (GREEN)		
D706	8-719-975-84	LED	AY1101W (+) (AMBER)		
D706	8-719-987-43	LED	CL-150PG-CD (+) (GREEN)		
D707	8-719-975-84	LED	AY1101W (3) (AMBER)		
D707	8-719-987-43	LED	CL-150PG-CD (3) (GREEN)		
D708	8-719-975-84	LED	AY1101W (2) (AMBER)		
D708	8-719-987-43	LED	CL-150PG-CD (2) (GREEN)		
D709	8-719-975-84	LED	AY1101W (1) (AMBER)		
D709	8-719-987-43	LED	CL-150PG-CD (1) (GREEN)		
D710	8-719-975-84	LED	AY1101W (6) (AMBER)		
D710	8-719-987-43	LED	CL-150PG-CD (6) (GREEN)		
D711	8-719-975-84	LED	AY1101W (5) (AMBER)		
D711	8-719-987-43	LED	CL-150PG-CD (5) (GREEN)		
D712	8-719-975-84	LED	AY1101W (4) (AMBER)		
D712	8-719-987-43	LED	CL-150PG-CD (4) (GREEN)		
D713	8-719-975-84	LED	AY1101W (OFF) (AMBER)		
D713	8-719-987-43	LED	CL-150PG-CD (OFF) (GREEN)		
D714	8-719-975-84	LED	AY1101W (M.SCAN/BTM) (AMBER)		
D714	8-719-987-43	LED	CL-150PG-CD (M.SCAN/BTM) (GREEN)		
D715	8-719-975-84	LED	AY1101W (TUNER) (AMBER)		
D715	8-719-987-43	LED	CL-150PG-CD (TUNER) (GREEN)		
D722	8-719-976-XX	DIODE	DTZ5.1B-TT11		
D723	8-719-977-03	DIODE	DTZ5.6B		
D724	8-719-977-03	DIODE	DTZ5.6B		
D725	8-719-977-03	DIODE	DTZ5.6B		
		< IC >			
IC701	8-759-171-25	IC	LC7582E		
		< JUMPER RESISTOR >			
JR701	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR702	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR703	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR705	1-216-295-00	METAL CHIP	0	5%	1/10W
		< LIQUID CRYSTAL DISPLAY >			
LCD1	1-810-393-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< PILOT LAMP >			
PL701	1-517-156-11	LAMP, PILOT (AMBER)			
PL701	1-517-156-51	LAMP, PILOT (GREEN)			
PL702	1-517-156-11	LAMP, PILOT (AMBER)			
PL702	1-517-156-51	LAMP, PILOT (GREEN)			
		< RESISTOR >			
R701	1-216-091-00	METAL CHIP	56K	5%	1/10W
R702	1-216-113-00	METAL CHIP	470K	5%	1/10W
R705	1-216-081-00	METAL CHIP	22K	5%	1/10W
R706	1-216-226-00	METAL GLAZE	15K	5%	1/8W
R707	1-216-220-00	METAL GLAZE	8.2K	5%	1/8W
R708	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R709	1-216-210-00	METAL GLAZE	3.3K	5%	1/8W
R710	1-216-081-00	METAL CHIP	22K	5%	1/10W
R711	1-216-077-00	METAL CHIP	15K	5%	1/10W
R712	1-216-071-00	METAL CHIP	8.2K	5%	1/10W

KEY MAIN

Ref.No.	Part No.	Description			Remark
R713	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R714	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R715	1-216-081-00	METAL CHIP	22K	5%	1/10W
R716	1-216-077-00	METAL CHIP	15K	5%	1/10W
R717	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R718	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R719	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R720	1-214-509-00	METAL GLAZE	10	1%	1/8W (GREEN)
R720	1-214-531-00	METAL GLAZE	82	1%	1/8W (AMBER)
R721	1-214-509-00	METAL GLAZE	10	1%	1/8W (GREEN)
R721	1-214-531-00	METAL GLAZE	82	1%	1/8W (AMBER)
R722	1-216-193-00	METAL GLAZE	620	5%	1/8W
R723	1-216-193-00	METAL GLAZE	620	5%	1/8W
R724	1-216-193-00	METAL GLAZE	620	5%	1/8W
R725	1-216-193-00	METAL GLAZE	620	5%	1/8W
R726	1-216-193-00	METAL GLAZE	620	5%	1/8W
R729	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R730	1-214-531-00	METAL GLAZE	82	1%	1/8W (AMBER)
R731	1-214-531-00	METAL GLAZE	82	1%	1/8W (AMBER)
		< SWITCH >			
S701	1-692-386-21	SWITCH (3)			
S702	1-692-386-21	SWITCH (4)			
S703	1-692-386-21	SWITCH (5)			
S704	1-572-704-21	SWITCH, KEY BOARD (6)			
S705	1-572-704-21	SWITCH, KEY BOARD (DSLP)			
S706	1-572-704-21	SWITCH, KEY BOARD (M.SCAN/BTM)			
S707	1-572-704-21	SWITCH, KEY BOARD (1)			
S708	1-572-704-21	SWITCH, KEY BOARD (2)			
S709	1-572-704-21	SWITCH, KEY BOARD (SEEK/MANU, -)			
S710	1-692-386-21	SWITCH (SEEK/MANU, +)			
S711	1-572-704-21	SWITCH, KEY BOARD (LOUD)			
S712	1-692-386-21	SWITCH (TUNER)			
S713	1-572-704-21	SWITCH, KEY BOARD (MUTE)			
S714	1-572-704-21	SWITCH, KEY BOARD (-)			
S715	1-692-386-21	SWITCH (SEL)			
S716	1-572-704-21	SWITCH, KEY BOARD (+)			
S717	1-572-704-21	SWITCH, KEY BOARD (SENS)			
S718	1-572-704-21	SWITCH, KEY BOARD (OFF)			
**********					
*	A-3222-743-A	MAIN BOARD, COMPLETE			(XR-3312)
		**********			
*	A-3222-744-A	MAIN BOARD, COMPLETE			(XR-3310)
		**********			
*	A-3222-745-A	MAIN BOARD, COMPLETE			(XR-4412)
		**********			
*	A-3222-746-A	MAIN BOARD, COMPLETE			(XR-4410)
		**********			
*	3-909-091-01	BRACKET (IC)			

Ref.No.	Part No.	Description			Remark
		< CAPACITOR >			
C2	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C3	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C4	1-128-524-11	ELECT	47uF	20%	10V
C5	1-128-524-11	ELECT	47uF	20%	10V
C6	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C7	1-128-524-11	ELECT	47uF	20%	10V
C8	1-128-225-11	ELECT	100uF	25%	10V
C9	1-136-175-00	FILM	0.068uF	5%	50V
C10	1-126-111-11	ELECT	3.3uF	20%	50V
C11	1-126-111-11	ELECT	3.3uF	20%	50V
C12	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C14	1-126-933-11	ELECT	100uF	20%	10V
					(XR-3312/4412)
C15	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C16	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C18	1-163-205-00	CERAMIC CHIP	0.001uF	5%	50V
C20	1-124-916-11	ELECT	22uF	20%	25V
C22	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C23	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C24	1-136-157-00	FILM	0.022uF	5%	50V
C25	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C26	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C27	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C101	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C102	1-164-232-11	CERAMIC CHIP	0.01uF	10%	50V
C103	1-126-154-11	ELECT	47uF	20%	6.3V
C105	1-126-301-11	ELECT	1uF	20%	50V
					(XR-4410/4412)
C106	1-124-254-00	ELECT	0.68uF	20%	50V
					(XR-4410/4412)
C107	1-126-301-11	ELECT	1uF	20%	50V
C108	1-126-159-11	ELECT	0.47uF	20%	50V
C109	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C110	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C111	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C112	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C114	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C115	1-126-157-11	ELECT	10uF	20%	16V
C116	1-126-157-11	ELECT	10uF	20%	16V
C117	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C118	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C119	1-136-165-00	FILM	0.1uF	5%	50V
C120	1-136-165-00	FILM	0.1uF	5%	50V
C121	1-136-165-00	FILM	0.1uF	5%	50V
C122	1-136-165-00	FILM	0.1uF	5%	50V
C124	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C125	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C126	1-126-288-11	ELECT	4.7uF	20%	16V

Ref.No.	Part No.	Description			Remark
C201	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C202	1-164-232-11	CERAMIC CHIP	0.01uF	10%	50V
C203	1-126-154-11	ELECT	47uF	20%	6.3V
C205	1-126-301-11	ELECT	1uF	20%	50V
					(XR-4410/4412)
C206	1-124-254-00	ELECT	0.68uF	20%	50V
					(XR-4410/4412)
C207	1-126-301-11	ELECT	1uF	20%	50V
C208	1-126-159-11	ELECT	0.47uF	20%	50V
C209	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C210	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C211	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C212	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C214	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C215	1-126-157-11	ELECT	10uF	20%	16V
C216	1-126-157-11	ELECT	10uF	20%	16V
C217	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C218	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C219	1-136-165-00	FILM	0.1uF	5%	50V
C220	1-136-165-00	FILM	0.1uF	5%	50V
C221	1-136-165-00	FILM	0.1uF	5%	50V
C222	1-136-165-00	FILM	0.1uF	5%	50V
C224	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C225	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C226	1-126-288-11	ELECT	4.7uF	20%	16V
C302	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C303	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C304	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C305	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C306	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C308	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C310	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C311	1-125-701-11	CAP, DOUBLE LAYER			0.047F
C312	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C313	1-124-584-00	ELECT	100uF	20%	10V
C314	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C407	1-124-229-00	ELECT	33uF	20%	10V
C408	1-124-584-00	ELECT	100uF	20%	10V
					(XR-4410/4412)
C409	1-126-157-11	ELECT	10uF	20%	16V
					(XR-4410/4412)
C410	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C411	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C412	1-126-288-11	ELECT	4.7uF	20%	16V
C413	1-124-229-00	ELECT	33uF	20%	10V
C414	1-124-229-00	ELECT	33uF	20%	10V
C415	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C420	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C501	1-126-936-11	ELECT	3300uF	20%	16V

Ref.No.	Part No.	Description			Remark
C502	1-136-169-00	FILM	0.22uF	5%	50V
C503	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
					(XR-3310/3312)
C504	1-126-964-11	ELECT	10uF	20%	50V
C505	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C506	1-126-153-11	ELECT	22uF	20%	6.3V
C801	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
					(XR-3312/4412)
C802	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
					(XR-3312/4412)
C803	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
					(XR-3312/4412)
C804	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
					(XR-3312/4412)
C805	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
					(XR-3312/4412)
C807	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
					(XR-3312/4412)
C808	1-130-477-00	MYLAR	0.0033uF	5%	50V
					(XR-3312/4412)
C809	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
					(XR-3312/4412)
C810	1-126-963-11	ELECT	4.7uF	20%	50V
					(XR-3312/4412)
C811	1-136-175-00	FILM	0.068uF	5%	50V
					(XR-3312/4412)
C812	1-136-175-00	FILM	0.068uF	5%	50V
					(XR-3312/4412)
C813	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
					(XR-3312/4412)
C814	1-128-524-11	ELECT	47uF	20%	10V
					(XR-3312/4412)
C901	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C903	1-163-059-91	CERAMIC CHIP	0.01uF	10%	50V
C904	1-104-939-11	ELECT	47uF	20%	16V
C905	1-104-940-11	ELECT	10uF	20%	25V
C906	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C907	1-126-301-11	ELECT	1uF	20%	50V
C908	1-126-157-11	ELECT	10uF	20%	16V
C909	1-126-157-11	ELECT	10uF	20%	16V
C910	1-104-940-11	ELECT	10uF	20%	25V
C911	1-124-229-00	ELECT	33uF	20%	10V
C912	1-126-288-11	ELECT	4.7uF	20%	16V
C913	1-126-964-11	ELECT	10uF	20%	50V
C914	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C915	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C916	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C917	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C918	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C919	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C920	1-136-165-00	FILM	0.1uF	5%	50V

MAIN

Ref.No.	Part No.	Description			Remark
C921	1-136-165-00	FILM	0.1uF	5%	50V
C922	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C923	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C924	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C925	1-164-232-11	CERAMIC CHIP	0.01uF	10%	50V
		< JACK >			
CNJ1	1-764-425-11	JACK (ANT)			
* CNJ2	1-506-993-11	PIN, CONNECTOR (PC BOARD) 11P			
		< CONNECTOR >			
CNP901	1-764-426-11	PLUG, CONNECTOR 15P			
CNP902	1-764-422-11	PLUG, CONNECTOR 12P			
CNP903	1-764-424-11	JACK, PIN 2P (LINE OUT REAR)			
		< DIODE >			
D2	8-719-109-85	DIODE	RD5.1ES-B2		
D301	8-719-901-33	DIODE	1SS133 (XR-3310/4410)		
D302	8-719-901-33	DIODE	1SS133 (XR-3312/4412)		
D305	8-719-901-33	DIODE	1SS133 (XR-4410/4412)		
D307	8-719-901-33	DIODE	1SS133 (XR-3312/4412)		
D308	8-719-901-33	DIODE	1SS133		
D309	8-719-901-33	DIODE	1SS133		
D403	8-719-974-59	DIODE	1SR139-100		
D501	8-719-027-24	DIODE	DSA3A4-F		
D801	8-719-901-33	DIODE	1SS133 (XR-3312/4412)		
D901	8-719-110-06	DIODE	RD8.2ESB1		
D902	8-719-109-97	DIODE	RD6.8ES-B2		
D903	8-719-914-44	DIODE	DAP202K		
D906	8-719-901-33	DIODE	1SS133		
D909	8-719-901-33	DIODE	1SS133		
D910	8-719-901-33	DIODE	1SS133		
D913	8-719-109-89	DIODE	RD5.6ESB2		
D914	8-719-109-89	DIODE	RD5.6ESB2		
D915	8-719-109-89	DIODE	RD5.6ESB2		
D916	8-719-109-89	DIODE	RD5.6ESB2		
D917	8-719-109-89	DIODE	RD5.6ESB2		
D918	8-719-109-89	DIODE	RD5.6ESB2		
D919	8-719-914-43	DIODE	DAN202K		
D920	8-719-988-43	DIODE	1SS355		
		< IC >			
IC301	8-759-256-21	IC	uPD17005GF-E24-3B9		
IC402	8-759-924-46	IC	BA4560F		
IC403	8-752-032-14	IC	CXA1102M (XR-4410/4412)		
IC404	8-752-063-44	IC	CXA1646Q		
IC405	8-759-909-71	IC	BA4558F		
IC406	8-759-909-71	IC	BA4558F		
IC501	8-759-160-00	IC	HA13151 (XR-3310/3312)		

Ref.No.	Part No.	Description			Remark
IC501	8-759-260-77	IC	HA13150A (XR-4410/4412)		
IC801	8-759-998-24	IC	TDA1579T (XR-3312/4412)		
IC901	8-759-182-75	IC	BA3910B-V2		
		< JUMPER RESISTOR >			
JR1	1-216-295-00	METAL CHIP	0	5%	1/10W
JR9	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR10	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR11	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR12	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR13	1-216-295-00	METAL CHIP	0	5%	1/10W
JR14	1-216-295-00	METAL CHIP	0	5%	1/10W
JR17	1-216-295-00	METAL CHIP	0	5%	1/10W
JR23	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR24	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR25	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR26	1-216-295-00	METAL CHIP	0	5%	1/10W
JR28	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR33	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR37	1-216-295-00	METAL CHIP	0	5%	1/10W
JR40	1-216-295-00	METAL CHIP	0	5%	1/10W
JR44	1-216-295-00	METAL CHIP	0	5%	1/10W
JR47	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR48	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR49	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR51	1-216-295-00	METAL CHIP	0	5%	1/10W
JR53	1-216-295-00	METAL CHIP	0	5%	1/10W
JR54	1-216-295-00	METAL CHIP	0	5%	1/10W
JR55	1-216-295-00	METAL CHIP	0	5%	1/10W
JR58	1-216-295-00	METAL CHIP	0	5%	1/10W
JR59	1-216-295-00	METAL CHIP	0	5%	1/10W
JR61	1-216-295-00	METAL CHIP	0	5%	1/10W
JR62	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR63	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR65	1-216-295-00	METAL CHIP	0	5%	1/10W
JR66	1-216-295-00	METAL CHIP	0	5%	1/10W
JR69	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR71	1-216-295-00	METAL CHIP	0	5%	1/10W
JR72	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR73	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR74	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR200	1-216-295-00	METAL CHIP	0	5%	1/10W
		< COIL >			
L301	1-410-973-11	INDUCTOR	22uH		
L801	1-424-036-21	COIL (FILTER)	(XR-3312/4412)		

Ref. No.	Part No.	Description	Remark
		< TRANSISTOR >	
Q2	8-729-901-01	TRANSISTOR DTC144EK	(XR-3312/4412)
Q3	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q4	8-729-901-01	TRANSISTOR DTC144EK	
Q5	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q6	8-729-422-29	TRANSISTOR 2SD601A-S	
Q7	8-729-901-06	TRANSISTOR DTA144EK	
Q8	8-729-920-74	TRANSISTOR 2SC2412K-QR	(XR-3312/4412)
Q102	8-729-920-21	TRANSISTOR DTC314TKH04	
Q103	8-729-920-21	TRANSISTOR DTC314TKH04	
Q202	8-729-920-21	TRANSISTOR DTC314TKH04	
Q203	8-729-920-21	TRANSISTOR DTC314TKH04	
Q404	8-729-106-60	TRANSISTOR 2SB1115A	
Q405	8-729-900-53	TRANSISTOR DTC114EK	
Q406	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q901	8-729-920-74	TRANSISTOR 2SC2412K-QR	
Q902	8-729-901-06	TRANSISTOR DTA144EK	
Q903	8-729-901-98	TRANSISTOR 2SA1036K-R	
Q904	8-729-900-53	TRANSISTOR DTC114EK	
Q906	8-729-901-06	TRANSISTOR DTA144EK	
Q907	8-729-901-01	TRANSISTOR DTC144EK	
Q908	8-729-901-06	TRANSISTOR DTA144EK	
Q909	8-729-901-01	TRANSISTOR DTC144EK	
Q910	8-729-216-22	TRANSISTOR 2SA1162-G	
Q911	8-729-216-22	TRANSISTOR 2SA1162-G	
Q912	8-729-216-22	TRANSISTOR 2SA1162-G	
		< RESISTOR >	
R1	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R2	1-216-005-00	METAL CHIP 15 5% 1/10W	
R3	1-216-005-00	METAL CHIP 15 5% 1/10W	
R4	1-216-295-00	METAL CHIP 0 5% 1/10W	
R5	1-216-295-00	METAL CHIP 0 5% 1/10W	
R6	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R7	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R8	1-216-059-00	METAL CHIP 2.7K 5% 1/10W	
R9	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R10	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R11	1-216-019-00	METAL CHIP 56 5% 1/10W	
R12	1-208-291-11	METAL GLAZE 4.7M 5% 1/10W	
R13	1-216-190-00	METAL GLAZE 470 5% 1/8W	
R14	1-216-105-00	METAL CHIP 220K 5% 1/10W	
R15	1-216-129-00	METAL CHIP 2.2M 5% 1/10W	
R16	1-216-105-00	METAL CHIP 220K 5% 1/10W	
R18	1-216-049-11	METAL CHIP 1K 5% 1/10W	
R21	1-216-049-00	METAL CHIP 1K 5% 1/10W	(XR-3312/4412)
R21	1-216-295-00	METAL CHIP 0 5% 1/10W	(XR-3310/4410)
R22	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	(XR-3312/4412)
R24	1-216-089-00	METAL GLAZE 47K 5% 1/10W	(XR-3312/4412)

Ref. No.	Part No.	Description	Remark
R25	1-216-113-00	METAL CHIP 470K 5% 1/10W	
R26	1-216-001-00	METAL CHIP 10 5% 1/10W	
R28	1-216-062-00	METAL CHIP 3.6K 5% 1/10W	
R29	1-216-062-00	METAL CHIP 3.6K 5% 1/10W	
R30	1-216-054-00	METAL GLAZE 1.6K 5% 1/10W	
R31	1-208-291-11	METAL GLAZE 4.7M 5% 1/10W	
R32	1-216-073-00	METAL CHIP 10K 5% 1/10W	(XR-3312/4412)
R101	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R102	1-216-077-00	METAL CHIP 15K 5% 1/10W	(XR-3310/3312)
R102	1-216-073-00	METAL CHIP 10K 5% 1/10W	(XR-4410/4412)
R103	1-216-115-00	METAL CHIP 560K 5% 1/10W	(XR-3310/3312)
R103	1-216-105-00	METAL CHIP 220K 5% 1/10W	(XR-4410/4412)
R104	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	(XR-4410/4412)
R108	1-249-417-11	CARBON 1K 5% 1/4W	(XR-3310/3312)
R108	1-249-428-11	CARBON 8.2K 5% 1/4W	(XR-4410/4412)
R110	1-216-113-00	METAL CHIP 470K 5% 1/10W	
R111	1-216-073-00	METAL CHIP 10K 5% 1/10W	(XR-3310/4410)
R111	1-216-077-00	METAL CHIP 15K 5% 1/10W	(XR-3312/4412)
R112	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R113	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R114	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R115	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R116	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R117	1-216-071-00	METAL CHIP 8.2K 5% 1/10W	
R118	1-216-071-00	METAL CHIP 8.2K 5% 1/10W	
R119	1-216-129-00	METAL CHIP 2.2M 5% 1/10W	
R120	1-216-129-00	METAL CHIP 2.2M 5% 1/10W	
R121	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R122	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R123	1-249-385-11	CARBON 2.2 5% 1/6W	
R124	1-249-385-11	CARBON 2.2 5% 1/6W	
R125	1-249-385-11	CARBON 2.2 5% 1/6W	
R126	1-249-385-11	CARBON 2.2 5% 1/6W	
R129	1-216-017-00	METAL CHIP 47 5% 1/10W	(XR-3310/3312)
R130	1-216-295-00	METAL CHIP 0 5% 1/10W	(XR-3310/3312)
R131	1-216-238-00	METAL GLAZE 47K 5% 1/8W	
R132	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R133	1-216-077-00	METAL CHIP 15K 5% 1/10W	(XR-3310/4410)
R133	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	(XR-3312/4412)
R201	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R202	1-216-077-00	METAL CHIP 15K 5% 1/10W	(XR-3310/3312)
R202	1-216-073-00	METAL CHIP 10K 5% 1/10W	(XR-4410/4412)
R203	1-216-115-00	METAL CHIP 560K 5% 1/10W	(XR-3310/3312)
R203	1-216-105-00	METAL CHIP 220K 5% 1/10W	(XR-4410/4412)
R204	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	(XR-4410/4412)
R208	1-249-417-11	CARBON 1K 5% 1/4W	(XR-3310/3312)
R208	1-249-428-11	CARBON 8.2K 5% 1/4W	(XR-4410/4412)
R210	1-216-113-00	METAL CHIP 470K 5% 1/10W	
R211	1-216-073-00	METAL CHIP 10K 5% 1/10W	(XR-3310/4410)

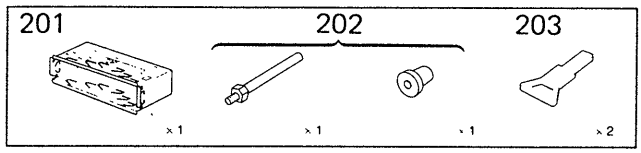
MAIN

Ref.No.	Part No.	Description			Remark
R211	1-216-077-00	METAL CHIP	15K	5% 1/10W	(XR-3312/4412)
R212	1-216-067-00	METAL CHIP	5.6K	5% 1/10W	
R213	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R214	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R215	1-216-049-00	METAL CHIP	1K	5% 1/10W	
R216	1-216-049-00	METAL CHIP	1K	5% 1/10W	
R217	1-216-071-00	METAL CHIP	8.2K	5% 1/10W	
R218	1-216-071-00	METAL CHIP	8.2K	5% 1/10W	
R219	1-216-129-00	METAL CHIP	2.2M	5% 1/10W	
R220	1-216-129-00	METAL CHIP	2.2M	5% 1/10W	
R221	1-216-077-00	METAL CHIP	15K	5% 1/10W	
R222	1-216-077-00	METAL CHIP	15K	5% 1/10W	
R223	1-249-385-11	CARBON	2.2	5% 1/6W	
R224	1-249-385-11	CARBON	2.2	5% 1/6W	
R225	1-249-385-11	CARBON	2.2	5% 1/6W	
R226	1-249-385-11	CARBON	2.2	5% 1/6W	
R229	1-216-017-00	METAL CHIP	47	5% 1/10W	(XR-3310/3312)
R230	1-216-295-00	METAL CHIP	0	5% 1/10W	(XR-3310/3312)
R231	1-216-238-00	METAL GLAZE	47K	5% 1/8W	
R232	1-216-089-00	METAL GLAZE	47K	5% 1/10W	
R233	1-216-077-00	METAL CHIP	15K	5% 1/10W	(XR-3310/4410)
R233	1-216-067-00	METAL CHIP	5.6K	5% 1/10W	(XR-3312/4412)
R301	1-216-049-00	METAL CHIP	1K	5% 1/10W	(XR-3310/4410)
R302	1-216-065-00	METAL CHIP	4.7K	5% 1/10W	
R303	1-216-150-00	METAL GLAZE	10	5% 1/8W	
R304	1-249-429-11	CARBON	10K	5% 1/4W	
R305	1-216-049-00	METAL CHIP	1K	5% 1/10W	(XR-3310/4410)
R306	1-249-421-11	CARBON	2.2K	5% 1/4W	
R307	1-216-049-00	METAL CHIP	1K	5% 1/10W	(XR-4410/4412)
R309	1-216-049-00	METAL CHIP	1K	5% 1/10W	(XR-4410/4412)
R311	1-249-417-11	CARBON	1K	5% 1/4W	
R312	1-249-417-11	CARBON	1K	5% 1/4W	
R313	1-216-085-00	METAL CHIP	33K	5% 1/10W	
R314	1-216-234-00	METAL GLAZE	33K	5% 1/8W	
R315	1-216-085-00	METAL CHIP	33K	5% 1/10W	
R316	1-216-085-00	METAL CHIP	33K	5% 1/10W	
R317	1-216-049-00	METAL CHIP	1K	5% 1/10W	
R318	1-216-049-00	METAL CHIP	1K	5% 1/10W	
R319	1-216-049-00	METAL CHIP	1K	5% 1/10W	
R320	1-216-067-00	METAL CHIP	5.6K	5% 1/10W	
R321	1-216-049-00	METAL CHIP	1K	5% 1/10W	
R322	1-216-113-00	METAL CHIP	470K	5% 1/10W	
R323	1-216-113-00	METAL CHIP	470K	5% 1/10W	
R325	1-247-895-00	CARBON	470K	5% 1/4W	
R327	1-216-113-00	METAL CHIP	470K	5% 1/10W	
R328	1-249-417-11	CARBON	1K	5% 1/4W	
R329	1-216-198-00	METAL GLAZE	1K	5% 1/8W	
R330	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
R331	1-216-085-00	METAL CHIP	33K	5% 1/10W	
R332	1-216-085-00	METAL CHIP	33K	5% 1/10W	
R333	1-216-085-00	METAL CHIP	33K	5% 1/10W	
R334	1-216-081-00	METAL CHIP	22K	5% 1/10W	
R335	1-249-417-11	CARBON	1K	5% 1/4W	
R338	1-216-089-00	METAL GLAZE	47K	5% 1/10W	
R339	1-216-049-00	METAL CHIP	1K	5% 1/10W	(XR-3312/4412)
R340	1-249-429-11	CARBON	10K	5% 1/4W	
R341	1-216-089-00	METAL GLAZE	47K	5% 1/10W	
R408	1-249-385-11	CARBON	2.2	5% 1/6W	
R409	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R410	1-216-059-00	METAL CHIP	2.7K	5% 1/10W	
R411	1-216-025-00	METAL CHIP	100	5% 1/10W	
R413	1-216-088-00	METAL CHIP	43K	5% 1/10W	(XR-4410/4412)
R414	1-216-025-00	METAL CHIP	100	5% 1/10W	(XR-4410/4412)
R415	1-216-113-00	METAL CHIP	470K	5% 1/10W	
R416	1-216-166-00	METAL GLAZE	47	5% 1/8W	
R417	1-216-121-00	METAL CHIP	1M	5% 1/10W	
R418	1-216-121-00	METAL CHIP	1M	5% 1/10W	
R501	1-249-429-11	CARBON	10K	5% 1/4W	
R502	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R503	1-249-423-11	CARBON	3.3K	5% 1/4W	
R510	1-246-461-11	CARBON	330	1/4W	
R801	1-216-067-00	METAL CHIP	5.6K	5% 1/10W	(XR-3312/4412)
R802	1-216-065-00	METAL CHIP	4.7K	5% 1/10W	(XR-3312/4412)
R803	1-216-067-00	METAL CHIP	5.6K	5% 1/10W	(XR-3312/4412)
R804	1-216-065-00	METAL CHIP	4.7K	5% 1/10W	(XR-3312/4412)
R805	1-216-116-00	METAL GLAZE	620K	5% 1/10W	(XR-3312/4412)
R806	1-216-089-00	METAL GLAZE	47K	5% 1/10W	(XR-3312/4412)
R807	1-216-067-00	METAL CHIP	5.6K	5% 1/10W	(XR-3312/4412)
R809	1-216-093-00	METAL CHIP	68K	5% 1/10W	(XR-3312/4412)
R810	1-216-065-00	METAL CHIP	4.7K	5% 1/10W	(XR-3312/4412)
R811	1-216-097-00	METAL CHIP	100K	5% 1/10W	(XR-3312/4412)
R812	1-216-041-00	METAL CHIP	470	5% 1/10W	(XR-3312/4412)
R813	1-216-089-00	METAL GLAZE	47K	5% 1/10W	(XR-3312/4412)
R814	1-216-105-00	METAL CHIP	220K	5% 1/10W	(XR-3312/4412)
R815	1-216-117-00	METAL CHIP	680K	5% 1/10W	(XR-3312/4412)
R901	1-216-077-00	METAL CHIP	15K	5% 1/10W	
R902	1-216-220-00	METAL GLAZE	8.2K	5% 1/8W	
R903	1-216-083-00	METAL CHIP	27K	5% 1/10W	(EXCEPT XR-3312)
R904	1-216-081-00	METAL CHIP	22K	5% 1/10W	
R905	1-216-073-00	METAL CHIP	10K	5% 1/10W	
R906	1-216-061-00	METAL CHIP	3.3K	5% 1/10W	
R907	1-216-061-00	METAL CHIP	3.3K	5% 1/10W	
R908	1-216-121-00	METAL CHIP	1M	5% 1/10W	
R910	1-216-270-00	METAL GLAZE	1M	5% 1/8W	
R911	1-216-105-00	METAL CHIP	220K	5% 1/10W	
R912	1-216-077-00	METAL CHIP	15K	5% 1/10W	
R913	1-216-073-00	METAL CHIP	10K	5% 1/10W	

Ref.No.	Part No.	Description	Remark
R914	1-216-105-00	METAL CHIP 220K 5% 1/10W	
R915	1-216-270-00	METAL GLAZE 1M 5% 1/8W	
R917	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R918	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R919	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R922	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R923	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R924	1-216-214-00	METAL CHIP 4.7K 5% 1/8W	
R925	1-216-214-00	METAL CHIP 4.7K 5% 1/8W(XR-4410/4412)	
R929	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R930	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R931	1-216-049-00	METAL CHIP 1K 5% 1/10W	
		< VARIABLE RESISTOR >	
RV101	1-238-596-11	RES, ADJ, CARBON 470 (PB LEVEL ADJ) (XR-3310/4410/4412)	
RV201	1-238-596-11	RES, ADJ, CARBON 470 (PB LEVEL ADJ) (XR-3310/4410/4412)	
RV801	1-238-595-11	RES, ADJ, CARBON 220 (ARI SENS.ADJ) (XR-3312/4412)	
		< SWITCH >	
S301	1-571-478-11	SWITCH, SLIDE (P. SEL)	
		< CRYSTAL >	
X301	1-567-713-11	VIBRATOR, CRYSTAL (4.5MHz)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	3-349-410-01	BUSHING	
	3-386-828-01	SCREW, FITTING	
	3-758-243-11	MANUAL, INSTRUCTION (ENGLISH/FRENCH/GERMAN/ITALIAN) (XR-3312/4412)	
	3-758-243-41	MANUAL, INSTRUCTION (ENGLISH/FRENCH) (XR-3310/4410)	
	3-758-244-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH/FRENCH/GERMAN/ITALIAN)	
*	3-906-075-31	CUSHION (UPPER)	
*	3-906-076-31	CUSHION (LOWER)	
*	3-911-441-01	INDIVIDUAL CARTON (XR-3310)	
*	3-911-443-01	INDIVIDUAL CARTON (XR-3312)	
*	3-911-752-01	INDIVIDUAL CARTON (XR-4412)	
*	3-911-809-01	INDIVIDUAL CARTON (XR-4410)	
	X-3367-692-1	CASE ASSY	
**********			

Ref.No.	Part No.	Description	Remark

MOUNTING HARDWARE



201	X-3367-691-1	FRAME ASSY, FITTING
202	X-3366-405-1	SCREW ASSY (EXP), FITTING
203	3-909-097-01	KEY

****
HARDWARE LIST
****

#1	7-621-773-95	SCREW +PTT 2.6X6 (S)
#2	7-621-772-10	SCREW +B 2X4
#3	7-621-775-08	SCREW +P 2.6X3
#4	7-621-770-67	SCREW +PTT 2.6X6 (S)
#5	7-621-770-XX	SCREW +PTT 2.6X8 (S)
#6	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT
#7	7-621-255-20	SCREW +P 2X4
#8	7-621-255-25	SCREW +PTT 2X4 (S)
#9	7-621-555-10	SCREW +K 2X3
#10	7-621-591-00	SCREW +K 2X4
#11	7-624-102-04	STOP RING 1.5, TYPE -E
#12	7-624-104-04	STOP RING 2.0, TYPE -E
#13	7-624-118-01	RING, RETAINING E-2.5
#14	7-627-553-88	SCREW, PRECISION +P 2X7
#15	7-621-255-15	SCREW +P 2X3

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Mobile Electronics Group

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